

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	7	"6664632" or "6445001"	USPAT	OR	OFF	2004/06/27 19:02
S2	2702	257/773	USPAT	OR	ON	2004/06/27 19:02
S3	1059	257/773 and (solder or BGA or grid)	USPAT	OR	ON	2004/06/27 19:02
S4	1188	257/773 and (solder or BGA or grid or ball or bump)	USPAT	OR	ON	2004/06/27 20:12
S5	22968	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and (lines or layers) and circuits	USPAT	OR	ON	2004/06/27 20:14
S6	11003	((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and (lines or layers) and circuits) and "257"/\$.ccls.	USPAT	OR	ON	2004/06/27 20:14
S7	332	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and (redistribution or rewir\$3 or redistribut\$3) with (lines or layers) and circuits	USPAT	OR	ON	2004/06/27 21:34
S8	748	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and (redistribution or rewir\$3 or redistribut\$3) and circuits	USPAT	OR	ON	2004/06/27 22:56
S9	416	((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and (redistribution or rewir\$3 or redistribut\$3) and circuits) not ((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and (redistribution or rewir\$3 or redistribut\$3) with (lines or layers) and circuits)	USPAT	OR	ON	2004/06/27 21:35
S10	1	"5400950".PN.	USPAT	OR	OFF	2004/06/27 22:30
S11	1	"5677575".PN.	USPAT	OR	OFF	2004/06/27 22:30
S12	1	"5731636".PN.	USPAT	OR	OFF	2004/06/27 22:30
S13	1	"5773882".PN.	USPAT	OR	OFF	2004/06/27 22:30
S14	1	"5814891".PN.	USPAT	OR	OFF	2004/06/27 22:31
S15	1	"5841194".PN.	USPAT	OR	OFF	2004/06/27 22:32
S16	1	"5909058".PN.	USPAT	OR	OFF	2004/06/27 22:32
S17	1	"6060775".PN.	USPAT	OR	OFF	2004/06/27 22:32

S18	1	"5397921".PN.	USPAT	OR	OFF	2004/06/27 22:39
S19	1	"5409865".PN.	USPAT	OR	OFF	2004/06/27 22:39
S20	1	"5646828".PN.	USPAT	OR	OFF	2004/06/27 22:39
S21	1	"6163458".PN.	USPAT	OR	OFF	2004/06/27 22:39
S22	1	"6287893".PN.	USPAT	OR	OFF	2004/06/27 22:39
S23	1	"4462534".PN.	USPAT	OR	OFF	2004/06/27 22:41
S24	1	"5024372".PN.	USPAT	OR	OFF	2004/06/27 22:41
S25	1	"5220200".PN.	USPAT	OR	OFF	2004/06/27 22:41
S26	1	"5261593".PN.	USPAT	OR	OFF	2004/06/27 22:41
S27	1	"5293067".PN.	USPAT	OR	OFF	2004/06/27 22:41
S28	1	"5346861".PN.	USPAT	OR	OFF	2004/06/27 22:41
S29	1	"5388327".PN.	USPAT	OR	OFF	2004/06/27 22:42
S30	1	"5455390".PN.	USPAT	OR	OFF	2004/06/27 22:42
S31	1	"5504277".PN.	USPAT	OR	OFF	2004/06/27 22:42
S32	1	"5539153".PN.	USPAT	OR	OFF	2004/06/27 22:42
S33	1	"5541450".PN.	USPAT	OR	OFF	2004/06/27 22:42
S34	1	"5547740".PN.	USPAT	OR	OFF	2004/06/27 22:42
S35	1	"5564617".PN.	USPAT	OR	OFF	2004/06/27 22:43
S36	1	"5604379".PN.	USPAT	OR	OFF	2004/06/27 22:43
S37	1	"5608262".PN.	USPAT	OR	OFF	2004/06/27 22:43
S38	1	"5701032".PN.	USPAT	OR	OFF	2004/06/27 22:43
S39	1	"5736456".PN.	USPAT	OR	OFF	2004/06/27 22:43
S40	1	"5777391".PN.	USPAT	OR	OFF	2004/06/27 22:44
S41	1	"5814894".PN.	USPAT	OR	OFF	2004/06/27 22:44
S42	1	"6287893".PN.	USPAT	OR	OFF	2004/06/27 22:45
S43	1	"4626889".PN.	USPAT	OR	OFF	2004/06/27 22:55
S44	1	"4833521".PN.	USPAT	OR	OFF	2004/06/27 22:55
S45	1	"5623628".PN.	USPAT	OR	OFF	2004/06/27 22:55
S46	1	"5945886".PN.	USPAT	OR	OFF	2004/06/27 22:55
S47	1	"5950304".PN.	USPAT	OR	OFF	2004/06/27 22:55
S48	1	"5983089".PN.	USPAT	OR	OFF	2004/06/27 22:55
S49	1	"6018196".PN.	USPAT	OR	OFF	2004/06/27 22:55
S50	1	"6020220".PN.	USPAT	OR	OFF	2004/06/27 22:55
S51	1	"6020637".PN.	USPAT	OR	OFF	2004/06/27 22:55
S52	1	"6048753".PN.	USPAT	OR	OFF	2004/06/27 22:55
S53	1	"6121815".PN.	USPAT	OR	OFF	2004/06/27 22:56
S54	1	"6114751".PN.	USPAT	OR	OFF	2004/06/27 22:56
S55	3388	257/778	USPAT	OR	OFF	2004/06/27 22:56

S56	2295	257/778 and (semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and circuits	USPAT	OR	ON	2004/06/27 23:16
S57	320	257/778 and (solder or BGA or grid or ball or bump) and pad and (outer or peripheral or edge) near (pad or contact or terminal) and circuits	USPAT	OR	ON	2004/06/27 22:58
S58	347	257/778 and (solder or BGA or grid or ball or bump) and pad and (outer or peripheral or edge) near (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/27 23:27
S59	1952	(257/778 and (semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) and pad and circuits) not (257/778 and (solder or BGA or grid or ball or bump) and pad and (outer or peripheral or edge) near (pad or contact or terminal or electrode) and circuits)	USPAT	OR	ON	2004/06/27 23:17
S60	1	"5371404".PN.	USPAT	OR	OFF	2004/06/27 23:18
S61	1	"5422513".PN.	USPAT	OR	OFF	2004/06/27 23:19
S62	1	"6201701".PN.	USPAT	OR	OFF	2004/06/27 23:19
S63	1	"6271469".PN.	USPAT	OR	OFF	2004/06/27 23:19
S64	1	"6492723".PN.	USPAT	OR	OFF	2004/06/27 23:21
S65	1	"3809625".PN.	USPAT	OR	OFF	2004/06/27 23:51
S66	1	"4268849".PN.	USPAT	OR	OFF	2004/06/27 23:51
S67	1	"5046161".PN.	USPAT	OR	OFF	2004/06/27 23:51
S68	1	"5329423".PN.	USPAT	OR	OFF	2004/06/27 23:51
S69	1	"5789271".PN.	USPAT	OR	OFF	2004/06/27 23:52
S70	1	"5903058".PN.	USPAT	OR	OFF	2004/06/27 23:52
S71	1	"6054773".PN.	USPAT	OR	OFF	2004/06/27 23:52
S72	1	"6350668".PN.	USPAT	OR	OFF	2004/06/27 23:53
S73	1	"6384481".PN.	USPAT	OR	OFF	2004/06/27 23:53
S74	1	"6249044".PN.	USPAT	OR	OFF	2004/06/27 23:53
S75	1	"6258705".PN.	USPAT	OR	OFF	2004/06/27 23:53
S76	1	"5046161".PN.	USPAT	OR	OFF	2004/06/28 00:19
S77	1	"5600180".PN.	USPAT	OR	OFF	2004/06/28 00:19
S78	1	"5629564".PN.	USPAT	OR	OFF	2004/06/28 00:19

S79	623	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with via and pad and (outer or peripheral or edge) near (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 04:17
S80	2124	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with via and pad and (outer or peripheral or edge) with (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 01:55
S81	1501	((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with via and pad and (outer or peripheral or edge) with (pad or contact or terminal or electrode) and circuits) not ((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with via and pad and (outer or peripheral or edge) near (pad or contact or terminal or electrode) and circuits)	USPAT	OR	ON	2004/06/28 03:42
S82	21	"4521449"	USPAT	OR	ON	2004/06/28 03:45
S83	10	"4562513"	USPAT	OR	ON	2004/06/28 03:47
S84	112	"5477933"	USPAT	OR	ON	2004/06/28 03:47
S85	1	"3978248".PN.	USPAT	OR	OFF	2004/06/28 04:13
S86	147	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (hole or via) and (pad or electrode) and (outermost or perimet\$3 ) near (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 05:31
S87	727	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (hole) and (pad or electrode) and (outer or perimet\$3 or peripheral or edge) near (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 06:45
S88	675	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with ( opening or open) and (pad or electrode) and (outer or perimet\$3 or peripheral or edge) near (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 06:46
S89	1390	257/734	USPAT	OR	OFF	2004/06/28 11:17
S90	9	wafer near holder with fixture	USPAT	OR	OFF	2004/06/28 11:29

S91	2550	wafer near holder	USPAT	OR	OFF	2004/06/28 11:21
S92	36	wafer near holding with fixture	USPAT	OR	OFF	2004/06/28 11:30
S93	7	wafer near holding with fixture and wafer with rotation	USPAT	OR	OFF	2004/06/28 11:31
S94	4	wafer near holding with fixture and wafer with rotating	USPAT	OR	OFF	2004/06/28 11:32
S95	21	wafer near hold\$3 with fixture and wafer with rotat\$3 and plat\$3 with wafer	USPAT	OR	OFF	2004/06/28 11:35
S96	5	wafer near hold\$3 with fixture and wafer with rotat\$3 and plat\$3 with wafer and wafer with etch\$3	USPAT	OR	OFF	2004/06/28 11:35
S97	11437	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (hole or via) and (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 13:34
S98	5672	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (hole or via) with (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 13:35
S99	3186	((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (hole or via) with (pad or contact or terminal or electrode) and circuits) and "257"/\$.ccls.	USPAT	OR	ON	2004/06/28 13:35
S100	3601	(semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (via) with (pad or contact or terminal or electrode) and circuits	USPAT	OR	ON	2004/06/28 13:35
S101	2239	((semiconductor or die or chip or IC) and (solder or BGA or grid or ball or bump) with (via) with (pad or contact or terminal or electrode) and circuits) and "257"/\$.ccls.	USPAT	OR	ON	2004/06/28 13:39
S103	804	257/688	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 12:25

S10 4	314	(semiconductor or die or chip or IC) and (inner or internal or inside) near (pad or terminal or contact) with connect\$3 with (outer or outside) near (pad or terminal or contact)	USPAT; JPO	OR	ON	2005/03/01 13:11
S10 5	402	(semiconductor or die or chip or IC) and (interposer or interconnect\$3 or redistribut\$3) and (inner or internal or inside) near (pad or terminal or contact) same (outer or outside) near (pad or terminal or contact)	USPAT; JPO	OR	ON	2005/03/01 14:44
S10 6	147120	(semiconductor or die or chip or IC) and (interposer or interconnect\$3 or redistribut\$3)	USPAT; JPO	OR	ON	2005/03/01 14:44
S10 7	58957	(semiconductor or die or chip or IC) same (interposer or interconnect\$3 or redistribut\$3)	USPAT; JPO	OR	ON	2005/03/01 14:44
S10 8	3682	S107 and (inner or internal or inside) with pad	USPAT; JPO	OR	ON	2005/03/01 14:45
S10 9	636	S107 and (inner or internal or inside) with pad same (peripheral or edge) with pad	USPAT; JPO	OR	ON	2005/03/01 14:47
S11 0	473	S107 and (inner or internal or inside) with pad with (peripheral or edge) with pad	USPAT; JPO	OR	ON	2005/03/01 14:49
S11 1	163	S109 not S110	USPAT; JPO	OR	ON	2005/03/01 16:26
S11 2	2376	257/777	USPAT; JPO	OR	ON	2005/03/01 16:27
S11 3	1012	257/781	USPAT; JPO	OR	ON	2005/03/01 16:27
S11 4	105	257/781	US-PGPUB; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:14
S11 5	1	"6437434".pn.	US-PGPUB; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:12
S11 6	1	"6437434"	US-PGPUB; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:12

S11 7	0	"6437434" and (power or ground or clock)	US-PGPUB; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:12
S11 8	1	"6437434" and (power or ground or clock)	US-PGPUB; USPAT; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:14
S11 9	195	257/780	US-PGPUB; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:14
S12 0	2123	257/780	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/01 20:34
S12 1	804	257/688	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/02 17:59
S12 2	1	"6445001".pn. and barrier	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/02 17:52
S12 3	367	257/733	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/02 19:00
S12 4	3	barrier with extension with pad same (semiconductor or chip or die)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/03/02 19:03
S12 5	1	barrier with extension with pad same (semiconductor or chip or die)	USPAT	OR	OFF	2005/03/02 19:03
S12 6	0	barrier with extension with pad same (semiconductor or chip or die) and "5886414"	USPAT	OR	OFF	2005/03/02 19:03

S12 7	1	barrier with extension with pad and (semiconductor or chip or die) and "5886414"	USPAT	OR	OFF	2005/03/02 19:06
S12 8	1	"6686659"	USPAT	OR	OFF	2005/03/02 19:06